EXHIBIT 9

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Public Comment Regarding: RIN: 0651-AB93: Changes to Practice for Continuing Applications, Requests for Continued Examination Practice, and Applications Containing Patentably Indistinct Claims

Date: 5/11/2007

Signer	Organization
Cecil D. Quillen, Jr.	

Materials provided to OMB (36 pages, 1,391 kb)

CECIL D. QUILLEN, JR.
4116 Hanover Avenue
Richmond, VA 23221-1923
May 11, 2007
(Via Telefax)

Ms. Susan Dudley
Administrator
Office of Information and Regulatory Affairs
The Office of Management and Budget
725 17th Street, NW
Washington, DC 20503

Re: *RIN: 0651-AB93*: Changes to Practice for Continuing Applications, Requests for Continued Examination Practice, and Applications Containing Patentably Indistinct Claims

Dear Ms. Dudley:

I am writing in connection with one of the sets of Rules of Practice proposed by the United States Patent & Trademark Office that I understand are under review in your office, specifically the Proposed Rules intended to limit the number of continuing applications filed by patent applicants and establishing procedures for acting on requests by applicants to file additional continuing applications.

The ability of patent applicants to refile their patent applications as many times as they wish, even after they have been Finally Rejected, is an utterly bizarre practice that violates the most elementary principles of management. Continuing applications (except for divisionals) are unique to the United States, and are a source of unnecessary rework imposed on the USPTO by patent applicants, who, as noted, may refile their applications as many times as they wish. Continuing applications also contribute to diminished patent quality by placing the USPTO in the position of being able to rid itself of persistent applicants only by allowing their applications. In addition, and perhaps of greater importance, continuing patent applications permit and encourage abuses that are a threat to the integrity of the United States patent system. The management of the USPTO is to be commended for their effort to limit them.

The Proposed Rules, however, would not entirely eliminate continuing applications and would create another bureaucratic procedure within the USPTO that diminishes the likelihood the hoped for savings in USPTO resources will be realized. Furthermore, it is doubtful the USPTO has the legal authority to adopt regulations that abridge statutory rights granted to patent applicants.

It would be far better for the United States patent system (and for the USPTO) to abolish entirely all continuing applications, with the possible exception of divisional applications filed pursuant to a 35 U.S.C. 121 requirement for restriction, which may be required by treaty obligations. Continuing applications, not counting divisional applications, comprised 29% of the applications filed at the USPTO in FY 2006 (34% if divisionals are counted). Their abolition would increase USPTO resources available for the examination of original applications by about 40% without any increase in staff or budget.

The most effective (and only assured) way to achieve these resource savings is to abolish all continuing applications except for divisional applications filed pursuant to 35 U.S.C. 121. Abolition would have the additional advantages of increasing patent quality by enabling the USPTO to obtain final decisions as to the patentability of pending applications, and would eliminate the abuses made possible by continuing applications. This abolition can be accomplished by repealing 35 U.S.C. 120 and 35 U.S.C. 132 (b), thereby eliminating the statutory bases for continuation and continuation-in-part applications, and for requests for continued examination.

Abolition of such continuing applications (including requests for continued examination) is a far superior management solution to the problem sought to be addressed by the proposed rules. I therefore urge that you recommend that the USPTO, rather than persisting in seeking to adopt the proposed rules, seek legislation to abolish all forms of continuing applications, except for divisional applications pursuant to 35 U.S.C. 121.

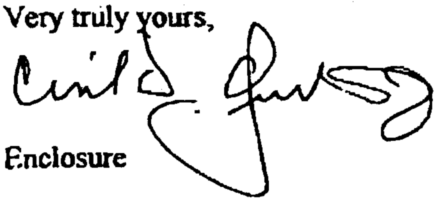
The organized patent bar, in their comments to the USPTO, opposed the proposed rules to limit continuing applications, and they are organizing to make their opposition known to you. They would undoubtedly oppose abolition as well. Apparently they want to continue to be assured of multiple "bites at the patent apple." I do not think it too much that those seeking a government granted monopoly should be expected to "get it right the first time," and not need or be afforded multiple "bites at the patent apple," frequently to the disadvantage of innovators who are victims of the abuses made possible by the availability of continuing applications. Their opposition should not be permitted to deter the USPTO from seeking abolition so as to improve the U.S. patent system.

Thus it is my recommendation to you that you recommend that the USPTO seek the legislation described above to eliminate entirely all continuing applications except for 35 U.S.C. divisionals rather than implementing rules based on dubious authority that create an additional bureaucratic procedure and very well may not achieve their intended purpose.

I have included for your information and convenience a presentation I made at the Intellectual Property Owners Patent Quality Conference in 2004 recommending abolition of continuing applications. The abuses made possible by continuing applications are catalogued by Professor Lemley and (now) Judge Moore in their paper *Ending Abuse of Patent Continuations*, published in the Boston University Law Review in 2004 (B.U. Law Review, Vol. 84, pages 63-118) that recommended abolition of all continuing applications except for Sec. 121 divisionals, although they recognized the political difficulties of doing so and proposed lesser solutions as well.

Please let me know if I can be of further assistance. I can be reached at the above address, or by phone at 804-254-3847 or email at cecilquillen@comcast.net.

Very truly yours,



Enclosure

ABOLISH CONTINUING PATENT APPLICATIONS ?

(Cecil D. Quillen, Jr.[1])

Harry, thank you. This is really old home week for me! Those of you who read resumes may have noticed that Harry and I both served as Chief Patent Counsels for what is now Eastman Chemical Company. It was Kodak's Chemicals Division when I was there.

Slim Webster, who is coauthor of the studies that are the predicate for my remarks, was Kodak's Assistant General Counsel and Chief Patent Counsel throughout my time as general counsel. He is here today. Jeff Hawley is Slim's successor at Kodak.

I should say a word about how Slim and I got interested in the effects of continuing applications. David Saxon, who was one of Kodak's outside Directors when I was on the Board, was MIT's president and had made his professional career in academic science. David thought the number of patents we got was a measure of the productivity of our research labs. I wanted to make sure David understood we could get as many patents as we were willing to pay for, and that the number of patents we got was certainly no indication of the productivity of our labs. I was afraid that if David persisted in his views, and our Research Director ever learned of it, and believed his performance was judged by the number of patents we got, we might bankrupt the company buying patents for him.

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[1] Presented April 19, 2004 at the Patent Quality Conference sponsored by the Intellectual Property Owners Association. Cecil Quillen is the former General Counsel of Eastman Kodak Company where he was a Senior Vice President and member of the Board of Directors. He is currently a Senior Advisor at Cornerstone Research, an economic consulting firm. Comments on drafts of this presentation by Robert Barr, Mark Lemley, and Ogden (Slim) Webster were especially helpful. The views expressed herein should not be attributed to those who provided comments, or to Eastman Kodak Company or Cornerstone Research.

I was even hoping that David, and the rest of the Board for that matter, would come to understand that a well-managed patent program would result in fewer, rather than more, patents.

To aid my discussions with David, Slim checked with the USPTO to find out how many continuing applications were filed each year. They said they didn't keep records of continuing applications. That was a truly astonishing answer in the midst of the Quality Management revolution. Continuing applications are rework for the USPTO, and for it to fail to keep records of the rework required of it, much less not attempt to manage it, violated the most elementary principles of Quality Management.

In 1998, long after I had retired from Kodak, I became interested in attempting a study relating to innovation and the U.S. patent system, and needed to know the number of original patent applications filed each year. I looked at the USPTO's 1997 Annual Report, and discovered they weren't reported, and that you couldn't determine them from the Annual Reports.

So I requested information as to filings of original applications and continuing applications a couple of times in 1998 that went unanswered, and again late in 1999 in a fairly "snarky" letter to then Commissioner Dickinson that made the point the information I was seeking was elementary management information which surely would have been collected by the USPTO.

About a month later I got a call from the USPTO telling me they had found information that might be responsive to my FOIA request, and asked if I wanted it. I didn't realize I had made a FOIA request, and wasn't sure I understood exactly what the information was, but asked that it be sent along anyway.

As you will see, this information enabled us to determine, for the first time ever so far as I know, the number of Original Applications filed in the USPTO, the portion of the USPTO workload that was rework comprised of refiled Continuing Applications, and, when combined with information from Annual Reports, examination performance of the USPTO for the years covered by the data. This first study was published in the August 2001 Federal Circuit Bar Journal.[2]

This **first slide** is a simplified depiction of application flow through the USPTO.

The Total Applications workload is made up of two kinds of applications, Original Applications and Continuing Applications. Continuing Applications claim priority from an earlier filed non-provisional application. Original Applications do not.

After Examination, applications are either Allowed or Abandoned, and Allowed Applications, or at least most of them, go on to become Patents. Many of the Abandoned Applications, however, are not in fact "abandoned" but are refiled as Continuing Applications and restart Examination all over again. And even some Allowed Applications are refiled.

USPTO Annual Reports, as I mentioned, do not report the number of Original Applications, or the number of refiled Continuing Applications, nor do they

[2] *The Federal Circuit Bar Journal*, Vol. 11, No. 1 (August 2001), pages 1-21.

report the number of Abandoned Applications the subject matter of which was not in fact abandoned but was instead included in a refiled Continuing Application. Thus it is not possible from the Annual Reports to determine USPTO examination performance, nor is it possible to determine the number of Original Applications, or the portion of the USPTO workload that is rework from refiled Continuing Applications.

This **next slide** is a copy of FOIA data[3] provided by the USPTO. The data reported all continuing applications activity for utility, plant and reissue (UPR) applications for the USPTO's fiscal years 1993-1998.

And this **next slide** summarizes USPTO Annual Report data for those years, along with the FOIA data, and calculations using both.

With the FOIA data we were able to determine the total number of refiled Continuing Applications and their impact on the USPTO workload. As you can see, they comprised 28.4% of the applications filed in fiscal years 1993-1998. Because refiled Continuing Applications are directed to subject matter that has already been examined, or could have been, they represent rework for the USPTO.

By subtracting Continuing Applications from Total Applications we determined the number of Original Applications filed in those years. We also determined the number of Original + Divisional applications.

[3] See USPTO FOIA Request No. 00-044.

And, by subtracting refiled Continuing Applications from Abandoned Applications, we were able to estimate the number of Net Abandonments, i.e., the number of applications abandoned without refiling, calculated (1) on the assumption that the parents of all continuing applications were abandoned in favor of the continuing applications, and (2) on the assumption that only the parents of continuations and CIPs were so abandoned.

Knowing the numbers of Original Applications, Net Abandonments, and Allowed Applications, we were able to calculate the actual examination performance of the USPTO.

We determined, as shown on this **next slide**, two measures of examination performance, Allowance Percentage and Grant Rate.

Allowance Percentage is the number of Applications Allowed divided by the number of Original Applications Filed. In our "refined" calculation, this included a two-year allowance for prosecution time.

Grant Rate is defined on the Trilateral Website as the number of Applications Allowed in a given period divided by the number of Application Disposals (Allowances + Abandonments) in the same period. The USPTO, EPO, and JPO all report Grant Rates on the Trilateral Website.

This **next slide** is from Table 7 of our first paper and summarizes the results of our first study. When corrected for continuing applications, and with a two-year prosecution lag, the Allowance Percentage for the USPTO was 95%. That is to say, the number of applications allowed in 1995-1998 was 95% of the number of

Original Applications filed in 1993-1996. And, even if divisional applications are treated as if they were Original Applications, the two-year lagged Allowance Percentage was 86%.

Allowance Percentages were also determined for the EPO and JPO, using all of the data then available for them. The lagged Allowance Percentages for the EPO and the JPO were 68% and 65%, respectively, both well below the USPTO numbers.

The champ though was the German Patent Office where Mike Scherer, Dietmar Harhoff, and Katrin Vopel had found that only 41.7% of the 1977 applications were allowed.

As to Grant Rates, as I indicated, the USPTO, EPO, and JPO all publish Grant Rates on the Trilateral Website. The averaged Grant Rates for the EPO and JPO for 1995-1999, as published on the Trilateral Website, were 67% and 64%, respectively.

USPTO Grant Rates on the Trilateral Website are not corrected for Continuing Applications. The uncorrected Grant Rate for the USPTO for its fiscal years 1993-1998 is 66%. But, when corrected for all refiled Continuing Applications, the USPTO Grant Rate is 97%, dropping to 87% when divisional applications are treated as if they were Original Applications. Both are above the averaged Grant Rates for the EPO and JPO.

One point made to us in connection with our first study was that it is possible for a patent to be granted on a continuation application and its parent, even though both are supposed to be for the same invention. This was discussed in footnote 17 of our first paper.

After our first paper had been published we were able to borrow a database from John Allison and Mark Lemley and estimate the numbers of such patents and their effects on our published results, which are shown in red on this **slide**. Allowance Percentages drop by about three percentage points and Grant Rates by about two percentage points, all of which are still above the results for the EPO and the JPO. These adjusted results are reported in our second paper.

The impetus for our second study, of which Rick Eichmann is also a coauthor, was the observation that virtually every reported patent statistic showed a major discontinuity following formation of the Federal Circuit.

For example, as illustrated by this **slide**, Jon Merz and Nicholas Pace, in a study published in the JPTOS in 1994,[4] found increases in application filings, patent grants, and patent litigation, all attributed to formation of the Federal Circuit.

Application filings, as shown on this **slide**, were level at about 100,000 per year from 1973 until formation of the Federal Circuit in 1982, and then commenced a dramatic rise, reaching nearly 350,000 in 2002.

This **slide** shows allowances and issuances from 1973 through 2002. Both began climbing after formation of the Federal Circuit. The decline prior to then, when considered with the relatively level patent filings shown on the prior slide,

[4] *Journal of the Patent and Trademark Office Society*, Vol. 76 (August 1994), pages 579-590.

suggests that the USPTO was perhaps becoming more rigorous in the years immediately prior to the Federal Circuit.

Perhaps most important for those of us in this room is the effect on demand for IP lawyers. This **slide**, from an article by John Barton of Stanford that was published in Science, the Journal of the American Association for the Advancement of Science, shows dramatic growth in the ratio of IP lawyers to R&D expenditures in the United States following formation of the Federal Circuit.

So, curious as to the effect of the Federal Circuit and the lowered and less certain standards for patentability promulgated by it on USPTO examination performance, we asked for data going back to 1975, or earlier, if available, so we would have data for both before and after formation of the Federal Circuit, and could determine its effect on the USPTO.

Unfortunately the USPTO had no reliable data for continuing applications for years prior to 1980, but they did provide us with data for the 1980-2000 period. This **slide** is a copy of the information.[5]

We have since obtained data for the 1980-2002 period for all three patent offices,[6] which will be reflected in the table and charts I will present shortly. The second of our studies, published in the August 2002 Federal Circuit Bar

[5] See USPTO FOIA Request No. 01-183. Paper copies of the relevant parts of USPTO Annual Reports for 1975-1980 and 1982-1992 were provided pursuant to USPTO FOIA Request No. 01-327.

[6] See USPTO FOIA Request No. 04-031 for the USPTO data for 1980-2002.

Journal,[7] is limited to data through 2000, since that was we all we had at the time of our work.

This **slide** shows Continuing Applications as a percent of Total Applications from 1980 through 2002. The percentage of Continuing Applications has nearly doubled, rising from about 15% in 1980 to about 28% in 2002. Divisional applications have been level at about 5%, except for the 1995 spike occasioned by the 20-year patent term. Continuing applications declined following the 1995 spike, but growth has resumed, and, as I said, comprised about 28% of applications filed in 2002.

This **next slide** shows the number of applications in the 1980-2002 period. All have grown dramatically, but, as was apparent from the previous slide, Continuing Applications have grown more than Original Applications.

This **slide** summarizes overall performance of the USPTO, EPO, and JPO, averaged over the twenty-three year period from 1980 through 2002. The USPTO numbers are lower than others you may have seen. But they don't reflect improved performance. Remember they are averages over a twenty-three year period in which performance in earlier years was better than performance in later years, as you will see momentarily. And, in all instances, performance of the USPTO was less rigorous than the EPO or JPO.

This **next slide** shows USPTO performance over time, which was the object of our second study. There is a rapid decline in examination performance following formation of the Federal Circuit as shown by the rise in Allowance

[7] *The Federal Circuit Bar Journal*, Vol. 12, No. 1 (August 2002), pages 35-55.

Percentages, **which peaked** in 1990, and thereafter oscillated between about 85% and about 95% (or between about 80% and 90% if divisional applications are treated as if they were original applications).

This **next slide** compares USPTO performance with that of the EPO and JPO over the same time period, as measured by Allowance Percentage. It shows the USPTO to be less rigorous throughout the whole period, except for a year or so in the mid to late 1990s when the EPO Allowance Percentage was higher.

This **next slide** shows Grant Rates for the USPTO. Corrected Grant Rates also increased following formation of the Federal Circuit. Corrected for continuation and continuation-in-part applications they rose from about 72% in 1984 to more than 90% in 2002. Uncorrected Grant Rates (the bottom line) have been essentially flat. And, as you can see from the bottom line, Grant Rates reported by the USPTO on the Trilateral Website are not corrected for continuing applications.

There are a couple of intervals where the calculated Grant Rate, corrected for all continuing applications, is over 100%, which is impossible. The reason for this anomaly is the assumption, for this calculation, that the parent application of every continuing application was abandoned in favor of the continuing application. This frequently is not the case for divisional applications, and occasionally for continuations and CIPs as well. The first of the anomalous periods is 1995 when divisional and other continuing application filings spiked because of the 20-year term.

This **next slide** compares Grant Rates for 1995-2002. The EPO, JPO, and Uncorrected USPTO Grant Rates are those reported on the Trilateral Website. Grant Rates for the USPTO, corrected for continuation and continuation-in-part applications, are about 20 percentage points higher than the uncorrected USPTO Grant Rates.

The USPTO was not thrilled with our finding that its performance trailed the EPO and JPO and published a critique of our first paper in the April 2003 JPTOS.[8] Their critique, which relied on unpublished data for a time period (1994-2000) that differed from that available to us for our first paper (1993-1998), did get different numbers, but by counting issued patents instead of allowed applications, and by omitting patents in which there was already a patent claiming the same priority filing date. The two-year lagged Allowance Percentage for their sample, which they didn't calculate, was 95%, the same as for ours. Their change from allowed applications to issued patents dropped their percentage to 88%, simply because of the time interval between allowance and issue, and their omission of issued patents where there was already a patent claiming the same priority date further dropped their percentage from 88% to 75%, which is still above Allowance Percentages for the EPO and the JPO. They did not mention our second paper although it was published eight months prior to theirs and addressed many of their criticisms. Nor did they examine changes over time in the numbers of continuing applications or in USPTO examination performance.

The latest, but probably not the last, word on this topic is a new report by the Organization for Economic Co-operation and Development (OECD) that Herb

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[8] *Journal of the Patent and Trademark Office Society*, Vol. 85 (April 2003), pages 335-349.

Wamsley brought to my attention a couple of weeks ago.[9] The OECD paper reports "grant rates" for the EPO and USPTO for essentially the same population of applications, i.e., for EPO applications claiming a U.S. priority date, and for U.S. applications that were subsequently filed in the EPO. They found that USPTO "grant rates" for this application population were "around 30 percentage points" higher than EPO "grant rates" for the same application population. This **slide** is Figure 7 from the OECD report. USPTO "grant rates" (the top line) are consistently between 80% and 90%. EPO "grant rates" for the same application population (the bottom line) start at about 65% and decline to about 50%. The OECD "grant rate" is not the same as the Grant Rate reported on the Trilateral Website. It is more akin to our Allowance Percentage.

Now to turn to the question of the day: patent quality and what these findings suggest.

Continuation and continuation-in-part applications are unique to the U.S. They currently represent nearly one-fourth of the examination workload of the USPTO. Because the subject matter of these refiled applications has already been examined, or could have been, they represent rework for the USPTO.

As we have just seen, the increase in refiled continuing applications has been accompanied by a decline in USPTO examination performance, whether measured by Allowance Percentage or Grant Rate. Perhaps this is because applicants can refile as often as they wish and avoid final decisions as to the patentability of their applications, leaving the USPTO without the ability to

[9] *Patents and Innovation: Trends and Policy Challenges*, OECD (2004), available through the OECD website, www.oecd.org.

obtain final patentability decisions, and in the position of being unable to rid itself of determined applicants except by allowing their applications. These inabilities are almost certainly a major reason why USPTO examination performance trails that of the EPO and JPO.

We have just gone through a legislative season in which patent quality was much discussed. The IPO, for example, through John Williamson when he was president, said:

> "IPO members believe patent quality is deficient. They are being fettered by increasing numbers of invalid patents."

Other patent lobby groups, e.g., AIPLA, the ABA IP Section, the 21st Century Coalition, BIO, etc., expressed similar sentiments. And the remedy proposed was to increase examination resources at the USPTO.

The quickest way to increase USPTO examination resources would be to abolish all continuing applications (except for Sec. 121 divisionals). This would immediately increase resources available for examination of Original Applications by about one-third, and would not require additional funding.

So, if the IPO and its sister lobby groups really believe the way to decrease the number of invalid patents and improve patent quality is to increase examination resources, they should demand immediate abolition of all continuing applications (except for Sec. 121 divisionals) so that resources now devoted to the rework such applications represent can instead be directed to the examination of Original Applications. Giving the USPTO the ability to obtain final patentability decisions should certainly reduce the number of invalid patents and enhance patent quality.

As to the USPTO, it claims to be a "Performance-Based Organization." But it tolerates a rework rate that has grown from something like 10% in 1980 to about 25% today. Certainly, no commercial enterprise (or its managers) would long survive a 25% rework rate, or growth from 10% to 25%. But the only way for the USPTO to gain control over this rework is for continuation and continuation-in-part applications to be abolished. So if the USPTO wants to make good its claim to be a "Performance-Based Organization," it too should demand immediate abolition of all continuation and continuation-in-part applications.

And if the USPTO is genuinely interested in improving patent quality and decreasing the number of invalid patents, it should want the ability to obtain final decisions as to the patentability of applications it has examined and not continue in the position of having to allow patent applications to rid itself of determined applicants.

It seems to me that these data alone make an overwhelming case for abolition of continuation and continuation-in-part applications, so I am not going to discuss the many abuses made possible by such applications that would be eliminated by their abolition. Some are mentioned in our two papers. A far more comprehensive list is in a new article by Mark Lemley and Kimberly Moore in the February 2004 issue of the Boston University Law Review,[10] which recommends abolition of all continuing applications, except for Sec. 121 divisionals.

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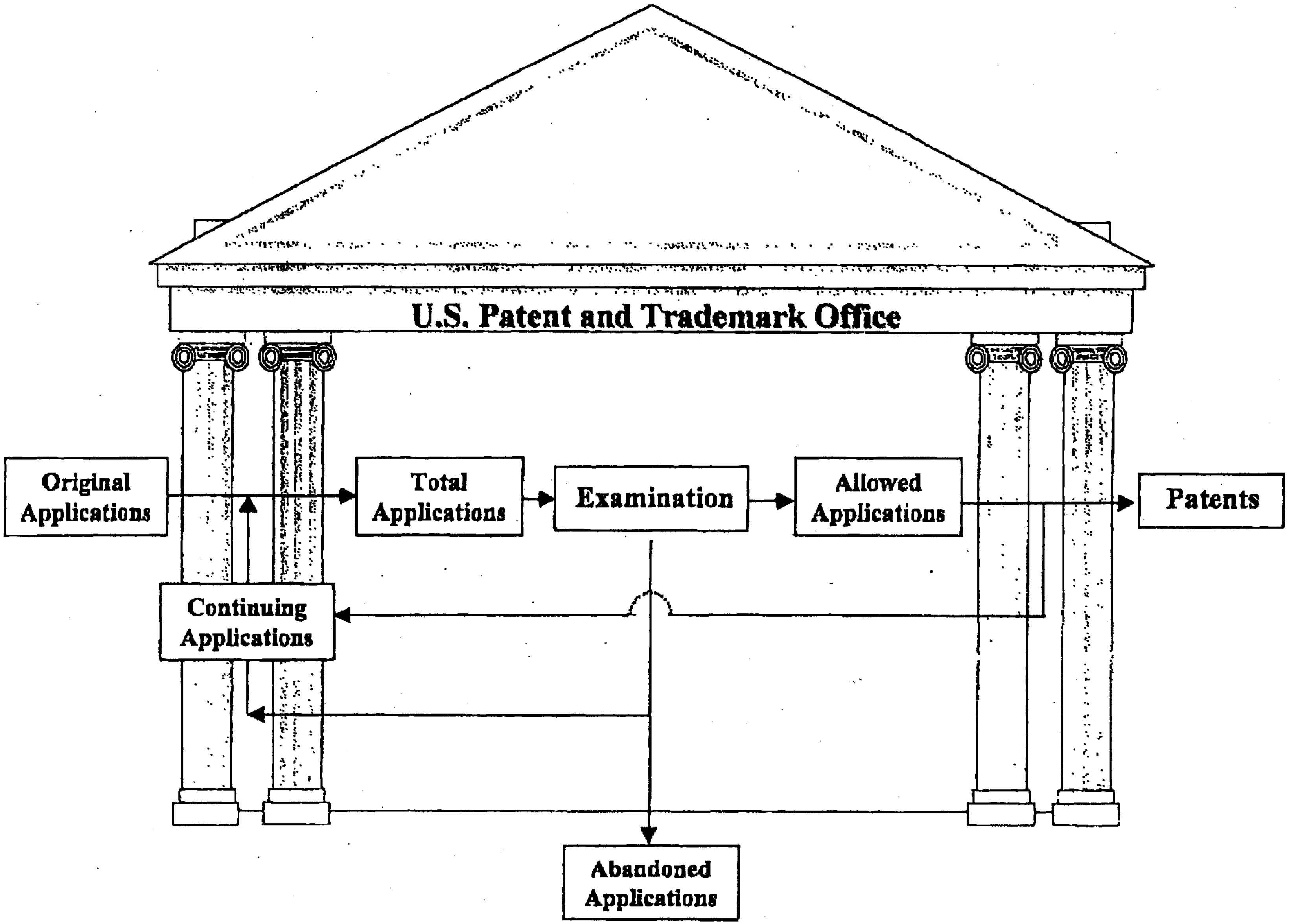
[10] *Boston University Law Review*, Vol. 84. (February 2004), pages 101-159.

Abolition undoubtedly would require administrative changes at the USPTO. Some resources made available would need to be applied to dealing with additional appeals by applicants who could no longer refile and instead appealed from Final Rejections rather than abandon their applications. And examiners should receive as much credit for filing appeal briefs as they do for first actions or disposals so they have as much incentive to persist in a rejection as to allow a case.

Although abolition of continuation and continuation-in-part applications is a necessary step for increasing patent quality and reducing the number of invalid patents, it will not by itself be sufficient to remove all of the impediments to innovation in the United States imposed by our current patent system. More, and more difficult, changes will be required. I am not going to discuss those other changes here today. I have written and spoken about them elsewhere and will be happy to share my thoughts with any of you who may be interested.

Questions?


U.S. Patent and Trademark Office
Original Applications
Total Applications
Examination
Allowed Applications
Patents
Continuing Applications
Abandoned Applications

	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998
Corps Totals - UPR						
Serialized UPR Filings	174,598	185,900	219,354	1$5,618	215,147	216,261
R 129 Filings	0	0	1, 599	5,020	3,734	2, 343
ACPA Filings	0	0	0	0	0	17,174
DCPA Filings	0	0	0	0	0	395
Subtotal	***0***	***0***	***1,599***	***5,020***	***3, 734***	***19,912***
Divisional Filings (Rule 53 only)	9,602	10,596	26,413	9,825	12,448	10,945
Continuation Filings (Rule 53 only)	28,339	32,041	37,849	23,955	28,829	13,294
CIP Filings (Rule 53 only)	12,889	13,912	15,914	10,469	10,574	10,639
Subtotal	***50, 830***	***56, 549***	***80,176***	***44, 249***	***51, 851***	***34, 8 78***
8129, ACPA, and Cont. Filings	28,339	32,041	39,448	?8,975	32,563	32,811
DCPA and Divisional Filings	9,602	10,596	26,413	9,825	12,448	11,340
CIP Filings	12,889	13,912	15,914	110,469	10,574	10,639
Rule 53s, R129s, CPAs	***50,830***	***56,549***	***81,775***	***49,269***	***55,585***	***54,790***
As a Percent of Total UPR Filings:						
8129 Filings	0.0%	0.0%	0.7%	2.6%	1 .7%	1 .0%
ACPA Filings	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%
DCPA Filings	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Subtotal	***0.0%***	***0.0%***	***0.7%***	***2.6%***	***1.7%***	***8.4%***
Divisional Filings (Rule 53 only)	5.5%	5.7%	12.0%	5.2%	5.7%	4.6%
Continuation Filings (Rule 53 only)	16.2%	17.2%	17.1 %	12.6%	13.2%	5.6%
CIP Filings (Rule 53 only)	7.4%	7.5%	7.2%	5.5%	4.8%	4.5%
Subtotal	***29.1 %***	***30.4%***	***36.3%***	***'23.2%***	***23.7%***	***14.8%***
Continuations (11129, ACPA, and Cont.)	16.2%	17.2%	17.9%	15.2%	14.9%	13.9%
Divisionals (DCPA and Divisionals)	5.5%	5.7%	12.0%	5.2%	5.7%	4.8%
CIP Filings	7.4%	7.5%	7.2%	5.5%	4.8%	4.5%
Rule 53s, R129s, CPAs	***29.1 %***	***30.4%***	***37.0%***	***25.8%***	***25.4%***	***23.2%***
Corps Total Filings - UPR	174,598	185,900	220,953	190,638	218,881	236,173

USPTO ANNUAL REPORT DATA

	1993	1994	1995	1996	1997	1998	Total
Total UPR Applications Filed	174,553	186,123	221,304	191,116	220,773	240,090	1,233,959
UPR Applications Allowed	104,351	107,221	106,566	121,694	135,240	143,045	718,117
UPR Applications Abandoned	60,763	64,932	66,460	58,358	61,367	60,102	371,982
UPR Patents Issued	97,386	102,130	102,579	105,529	112,646	140,159	660,429

USPTO FOIA DATA

	1993	1994	1995	1996	1997	1998	Total
Total UPR Applications Filed	174,598	185,900	220,953	190,638	218,881	236,173	1,227,143
Continuation Application Filings	28,339	32,041	39,448	28,975	32,563	32,811	194,177
Divisional Application Filings	9,602	10,596	26,413	9,825	12,448	11,340	80,224
Continuation-In-Part Filings	12,889	13,912	15,914	10,469	10,574	10,639	74,397
Total - Continuing Applications	50,830	56,549	81,775	49,269	55,585	54,790	348,798
Continuing Applications as % of Total	29.1%	30.4%	37.0%	25.8%	25.4%	23.2%	28.4%

CALCULATIONS

	1993	1994	1995	1996	1997	1998	Total
Total UPR Applications Filed	174,598	185,900	220,953	190,638	218,881	236,173	1,227,143
Continuing Applications	50,830	56,549	81,775	49,269	55,585	54,790	348,798
Original Applications	123,768	129,351	139,178	141,369	163,296	181,383	878,345
Original Applications + Divisionals	133,370	139,947	165,591	151,194	175,744	192,723	958,569
UPR Applications Abandoned	60,763	64,932	66,460	58,358	61,367	60,102	371,982
Continuing Applications	50,830	56,549	81,775	49,269	55,585	54,790	348,798
Net Abandoned (Continuing Applications)	9,933	8,383	(15,315)	9,089	5,782	5,312	23,184
Net Abandoned (Continuations & CIPs)	19,535	18,979	11,098	18,914	18,230	16,652	103,408

$$\text{Allowance Percentage} = \frac{\text{Applications Allowed}}{\text{Applications Filed}}$$

$$\text{Grant Rate} = \frac{\text{Applications Allowed}}{\text{Application Disposals}}$$

TABLE 7

SUMMARY

ALLOWANCE PERCENTAGES

(Applications Allowed as Percentage of Applications Filed/Examinations Requested)

	Overall	Two Year Lag
United States Patent & Trademark Office (1993-1998)		
Based on Original Applications	82%	95%
Based on Original + Divisional Applications	75%	86%
Based on Original + Divisional + CIP Applications	69%	78%
European Patent Office (1978-1999)	60%	68%
Japanese Patent Office (1988-1999)	57%	65%
German Patent Office (1977 Cohort)		41.7%

GRANT RATES

(Applications Allowed As Percentage Of Net Disposals)

United States Patent & Trademark Office (1993-1998)	
Based on Net Abandoned = Total Abandoned Less Total Refiled	97%
Based on Net Abandoned = Total Abandoned Less Continuations and CIPS	87%
Based on Net Abandoned = Total Abandoned Less Continuations	80%
Uncorrected Grant Rate (1993-1998)	66%
European Patent Office (1995-1999)	67%
Japanese Patent Office (1995, 1997-1999)	64%

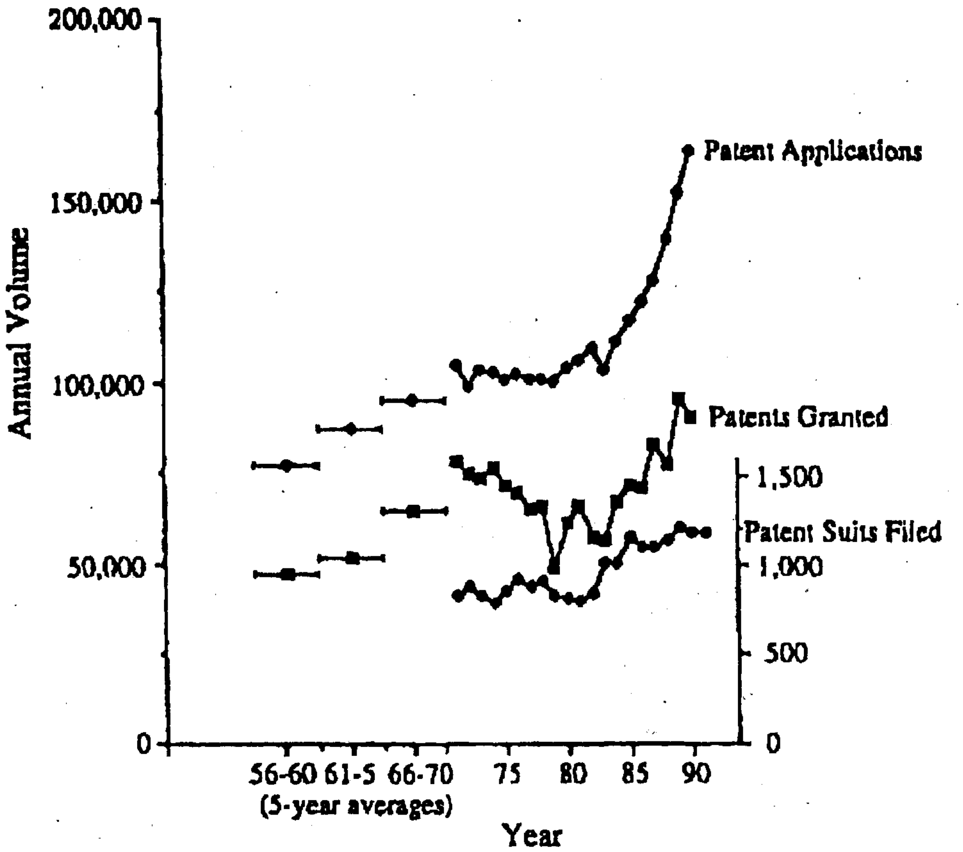
TABLE 7
SUMMARY

ALLOWANCE PERCENTAGES
(Applications Allowed as Percentage of Applications Filed/Examinations Requested)

United States Patent & Trademark Office (1993-1998)	Overall	Two Year Lag	
Based on Original Applications	82%	95%	
		92%	Adjusted for continuations in which patent granted on both parent and continuation
Based on Original + Divisional Applications	75%	86%	
		83%	Adjusted for all continuing applications in which patent granted on both parent and continuation
Based on Original + Divisional + CIP Applications	69%	76%	
European Patent Office (1978-1999)	60%	68%	
Japanese Patent Office (1988-1999)	57%	65%	
German Patent Office (1977 Cohort)		41.7%	

GRANT RATES
(Applications Allowed As Percentage Of Net Disposals)

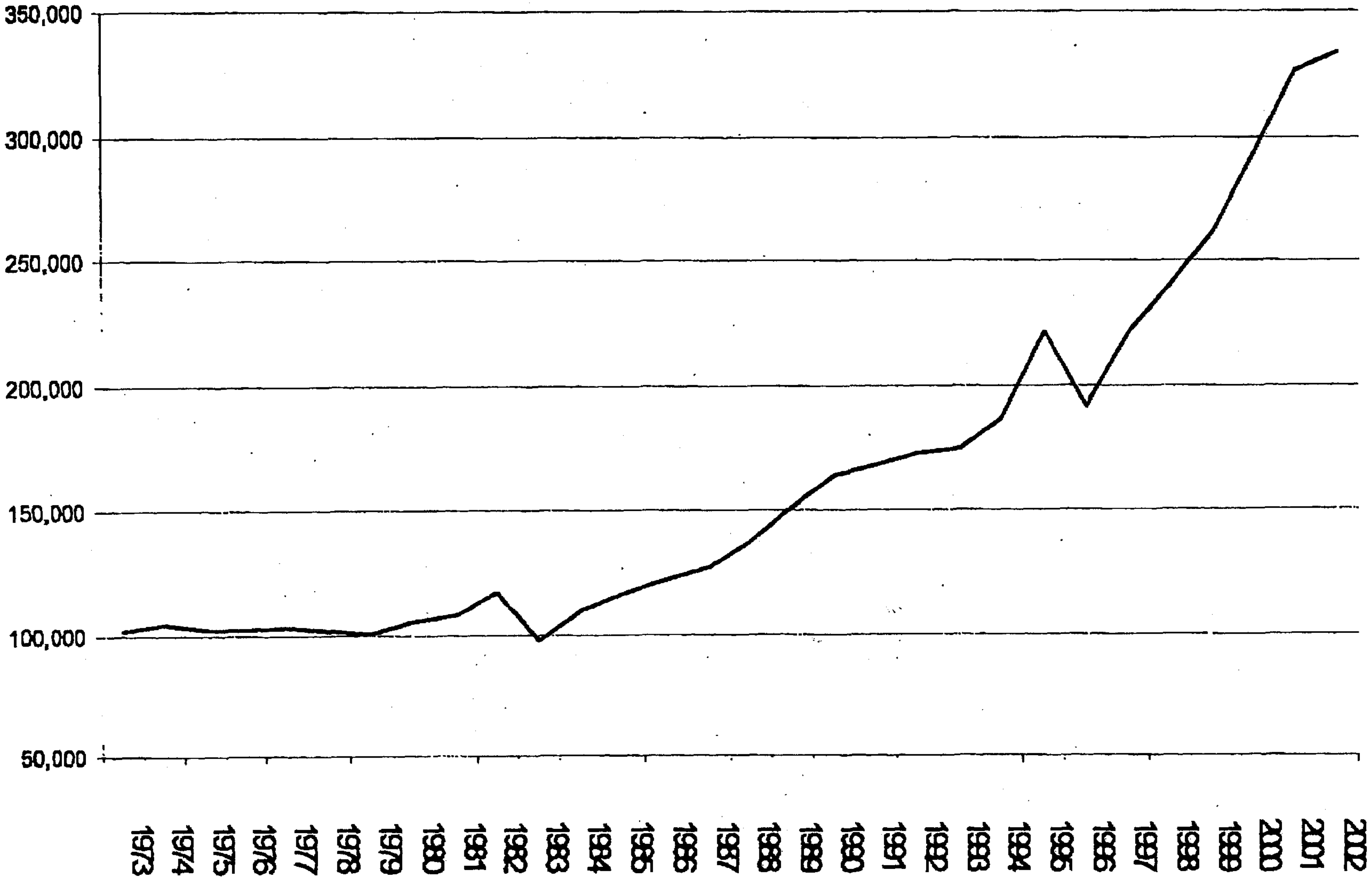
United States Patent & Trademark Office (1993-1998)		
Based on Net Abandoned = Total Abandoned Less Total Refiled	97%	
	95%	Adjusted for continuations in which patent granted on both parent and continuation
Based on Net Abandoned = Total Abandoned Less Continuations and CIPS	87%	
	85%	Adjusted for all continuing applications in which patent granted on both parent and continuation
Based on Net Abandoned = Total Abandoned Less Continuations	80%	
Uncorrected Grant Rate (1993-1998)	66%	
European Patent Office (1995-1999)	67%	
Japanese Patent Office (1995, 1997-1999)	64%	



200,000
150,000
100,000
50,000
0
Annual Volume
Patent Applications
Patents Granted
1,500
Patent Suits Filed
1,000
500
0
56-60 61-5 66-70 75 80 85 90
(5-year averages)
Year

Figure 3 Utility patent grants and applications, 1956 through 1991 (calendar years), and patent suit filings for the period 1971 to 1991 (statistical years). Note that the left scale applies to the patenting activity curves and the right scale applies to patent litigation.

Total U.S. Patent Applications Filed (1973 – 2002)



350,000
300,000
250,000
200,000
150,000
100,000
50,000
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
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1994
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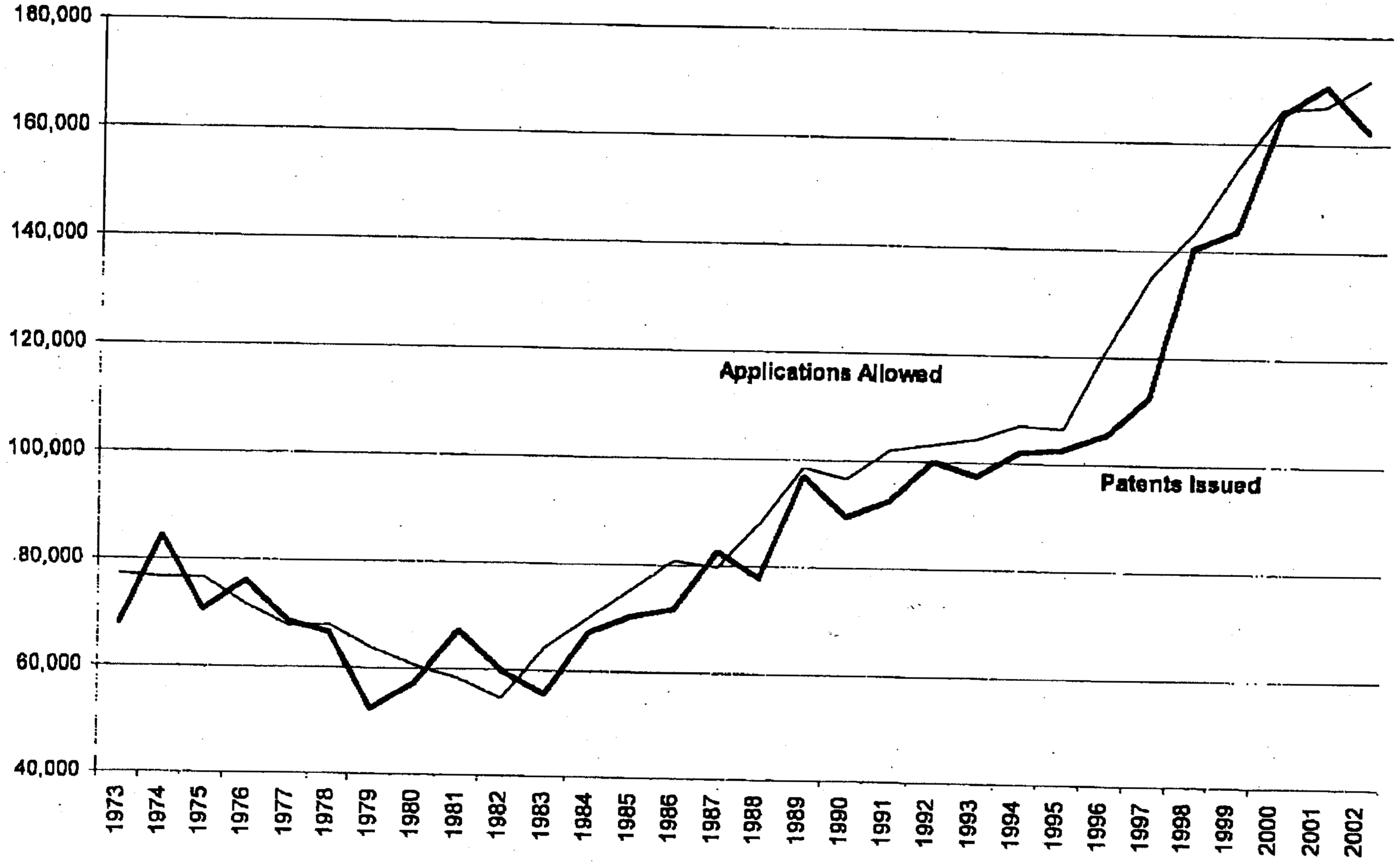
1997
1998
1999
2000
2001
2002

Patents by the Numbers

U.S. Application Allowances and Patent Grants (1973 – 2002)


180,000
160,000
140,000
120,000
100,000
80,000
60,000
40,000
Applications Allowed
Patents Issued
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
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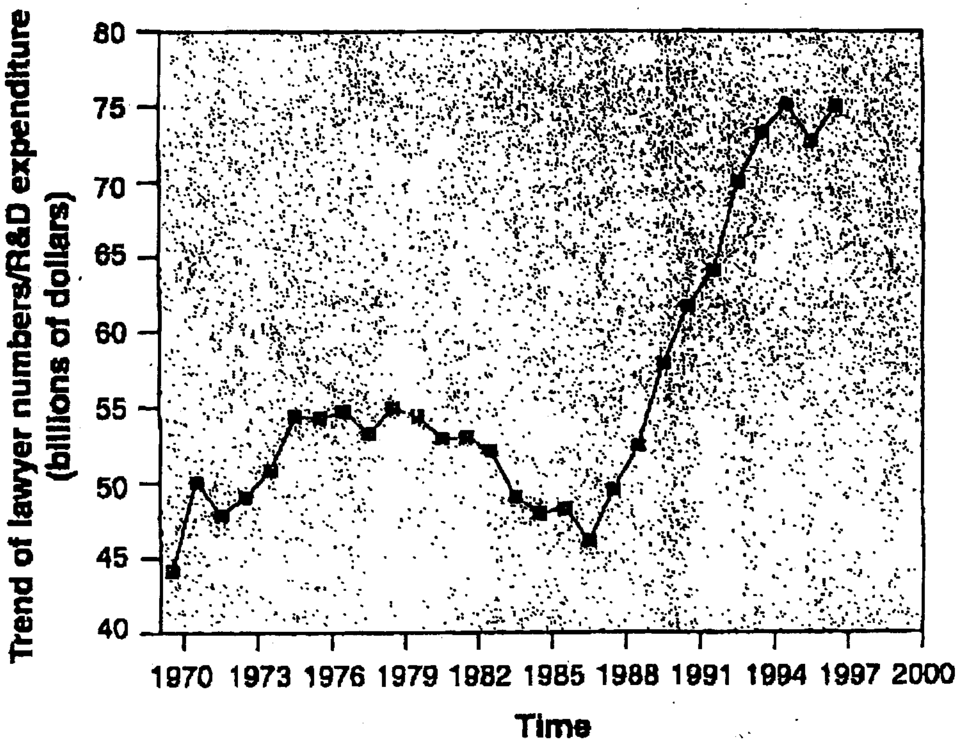
1995
1996
1997
1998
1999
2000
2001
2002


Trend of lawyer numbers/R&D expenditure (billions of dollars)
80
75
70
65
60
55
50
45
40
1970 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000
Time

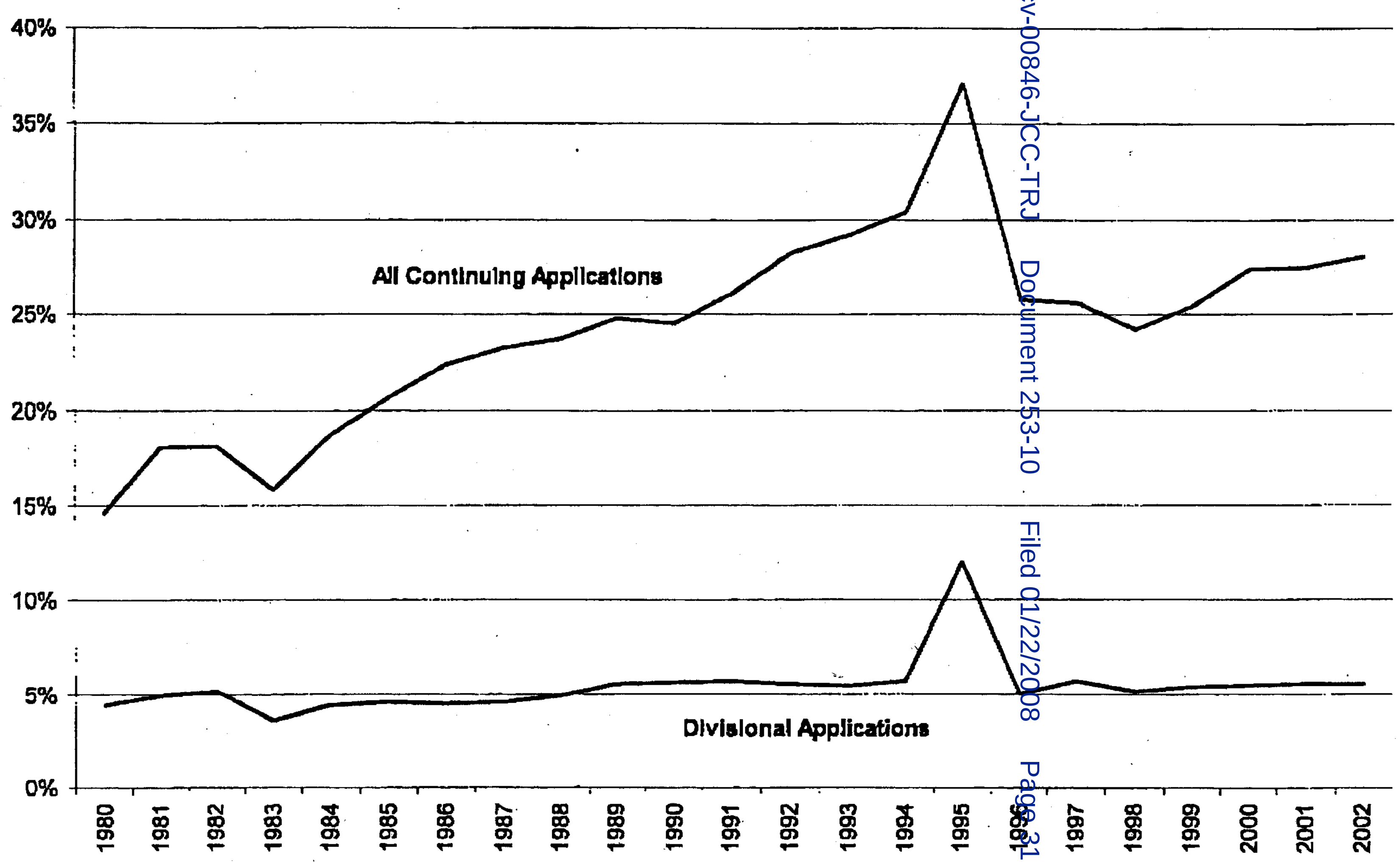
Numbers of intellectual property lawyers per unit of research expenditures in billions of dollars (*1*).

UPR FILINGS AND REFILINGS – 1980 +

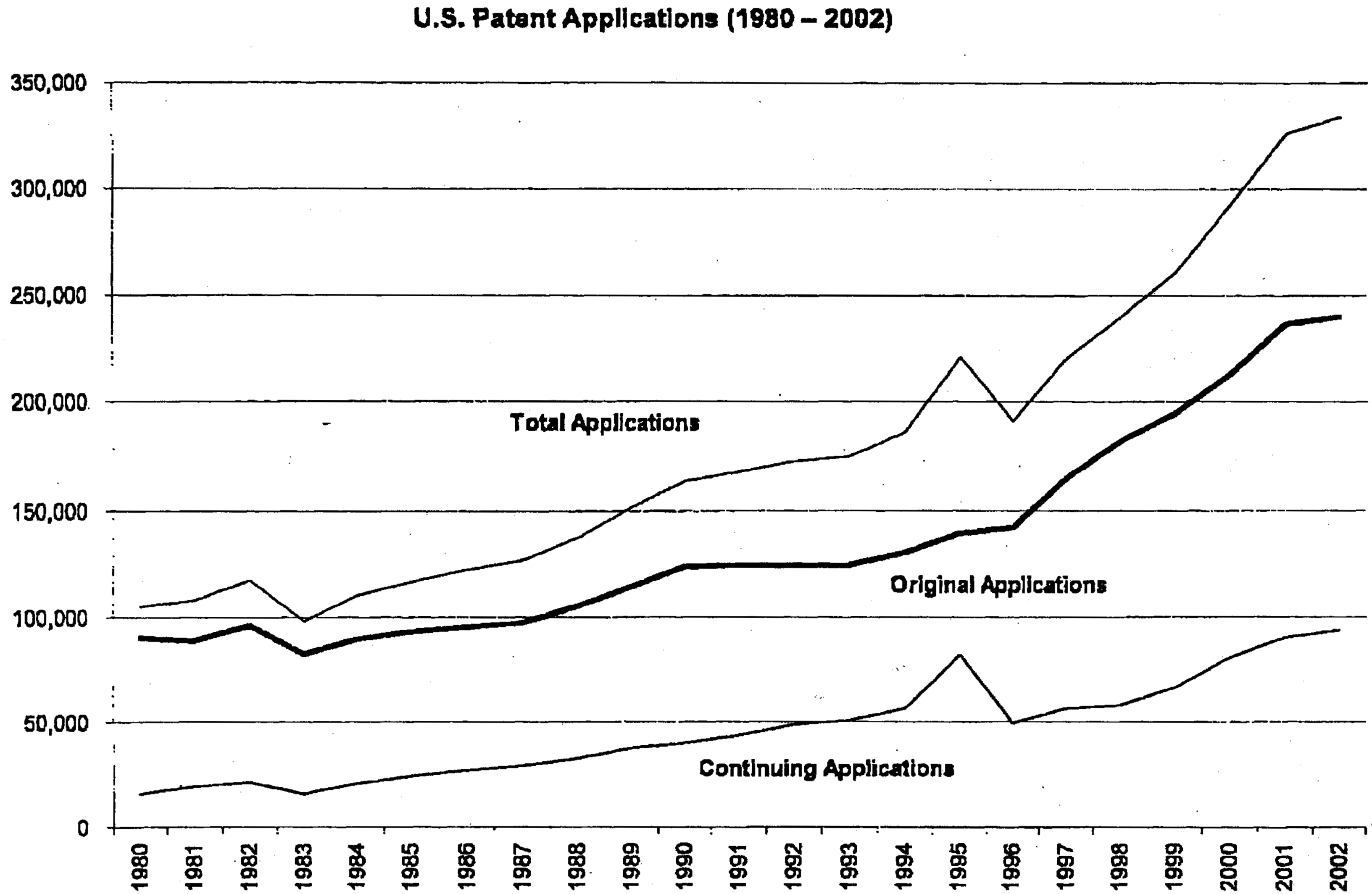
Fiscal Year	UPR Filings	Continuations	CPAs	RCEs	R129s	Divisionals	DCPAS	CIPs
FY80	93800	6117	0	0	0	4746	0	4735
FY81	107513	8263	0	0	0	5277	0	5824
FY82	116731	9144	0	0	0	5958	0	5993
FY83	97446	6812	0	0	0	3508	0	5105
FY84	109539	9608	0	0	0	4622	0	6066
FY85	116427	11992	0	0	0	5265	0	6778
FY86	121611	14202	0	0	0	5415	0	7560
FY87	126407	15651	0	0	0	5762	0	7952
FY88	137069	17158	0	0	0	6704	0	8680
FY89	151331	19490	0	0	0	8391	0	9615
FY90	163571	20379	0	0	0	9131	0	10625
FY91	167715	22852	0	0	0	9589	0	11417
FY92	172539	26643	0	0	0	9557	0	12566
FY93	174553	28390	0	0	0	9602	0	12904
FY94	186123	32053	0	0	0	10605	0	13928
FY95	221304	37683	0	0	1608	26439	0	15988
FY96	191116	24005	0	0	5019	9853	0	10582
FY97	220773	29123	0	0	3753	12587	0	11070
FY98	240090	14429	17609	0	2355	11961	399	11393
FY99	261041	13600	25463	0	945	13688	316	12300
FY2000	293244	18362	31148	1009	440	16175	262	13561
FY2001	189630	13460	17329	6780	115	11405	102	8379

Numbers provided above may not match numbers in the annual report, nor do the numbers necessarily match those numbers provided in an earlier FOIA request. PALM data undergoes routine alterations and updates based upon e.g., user realization of errors or updates that are based on papers entered after they were filed. The continuing data presented was retrieved via system queries on June 22nd and June 25th, 2001.

Continuing Applications as Percent of Total Applications


40%
35%
30%
25%
20%
15%
10%
5%
0%
All Continuing Applications
Divisional Applications
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002

Patents by the Numbers


U.S. Patent Applications (1980 – 2002)
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Total Applications
Original Applications
Continuing Applications

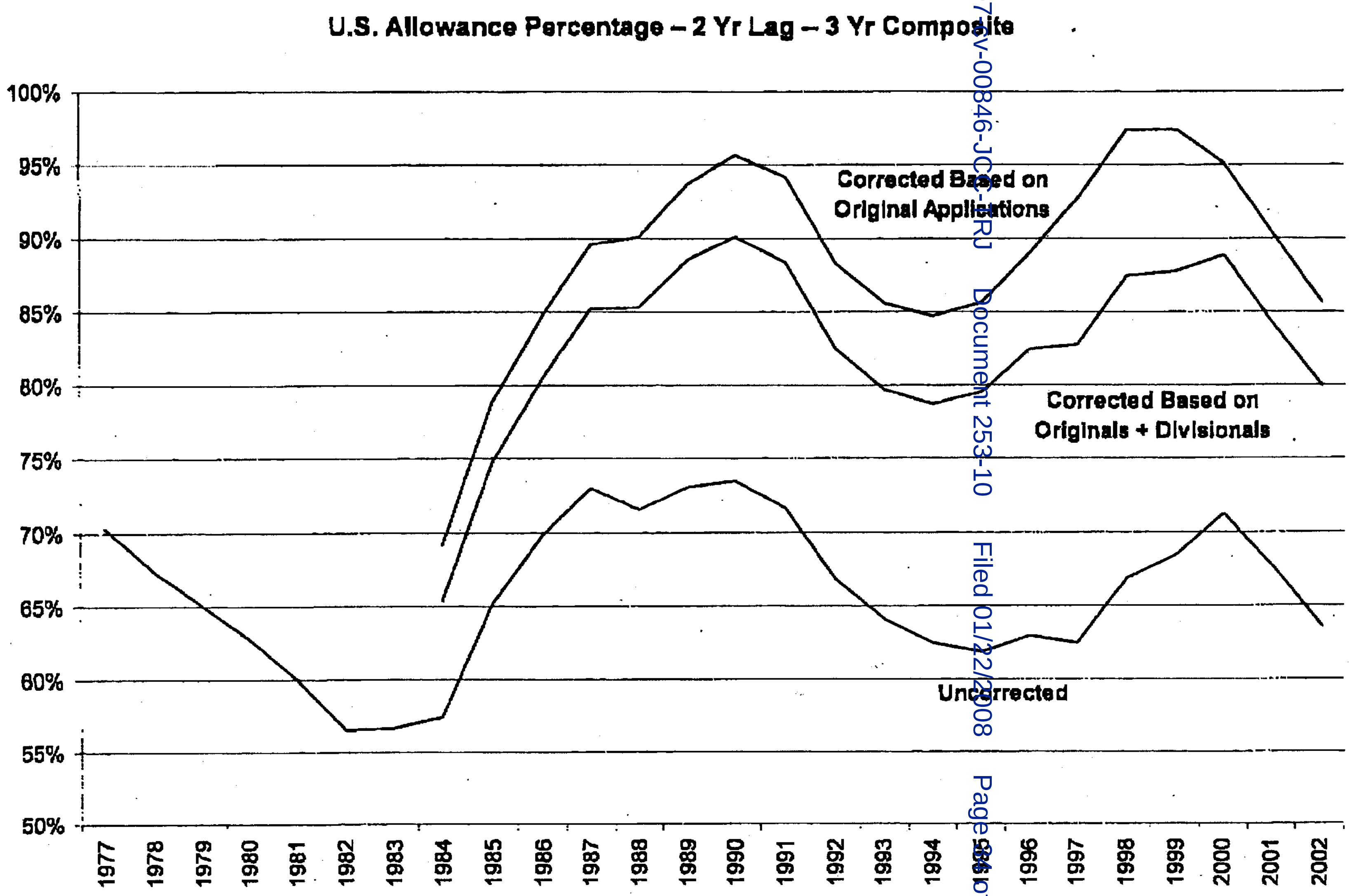
SUMMARY

ALLOWANCE PERCENTAGES (1980-2002)
(Applications Allowed as Percentage of Applications Filed/Examinations Requested)

United States Patent & Trademark Office	Overall	Prosecution Lag
Based on Original Applications	76%	88%
Based on Original + Divisional Applications	73%	82%
European Patent Office	62%	74%
Japanese Patent Office	50%	55%
German Patent Office (1977 Cohort)		41.7%

GRANT RATES
(Applications Allowed as Percentage of Net Disposals)

United States Patent & Trademark Office	1980-2002	1995-2002
Net Abandoned = Total Abandoned Less Continuations and CIPs	86%	93%
Uncorrected Grant Rate	66%	68%
European Patent Office	-	63%
Japanese Patent Office	-	61%


U.S. Allowance Percentage – 2 Yr Lag – 3 Yr Composite
100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
Corrected Based on Original Applications
Corrected Based on Originals + Divisionals
Uncorrected
1977
1978
1979
1980
1981
1982
1983
1984
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1986
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1988
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1992
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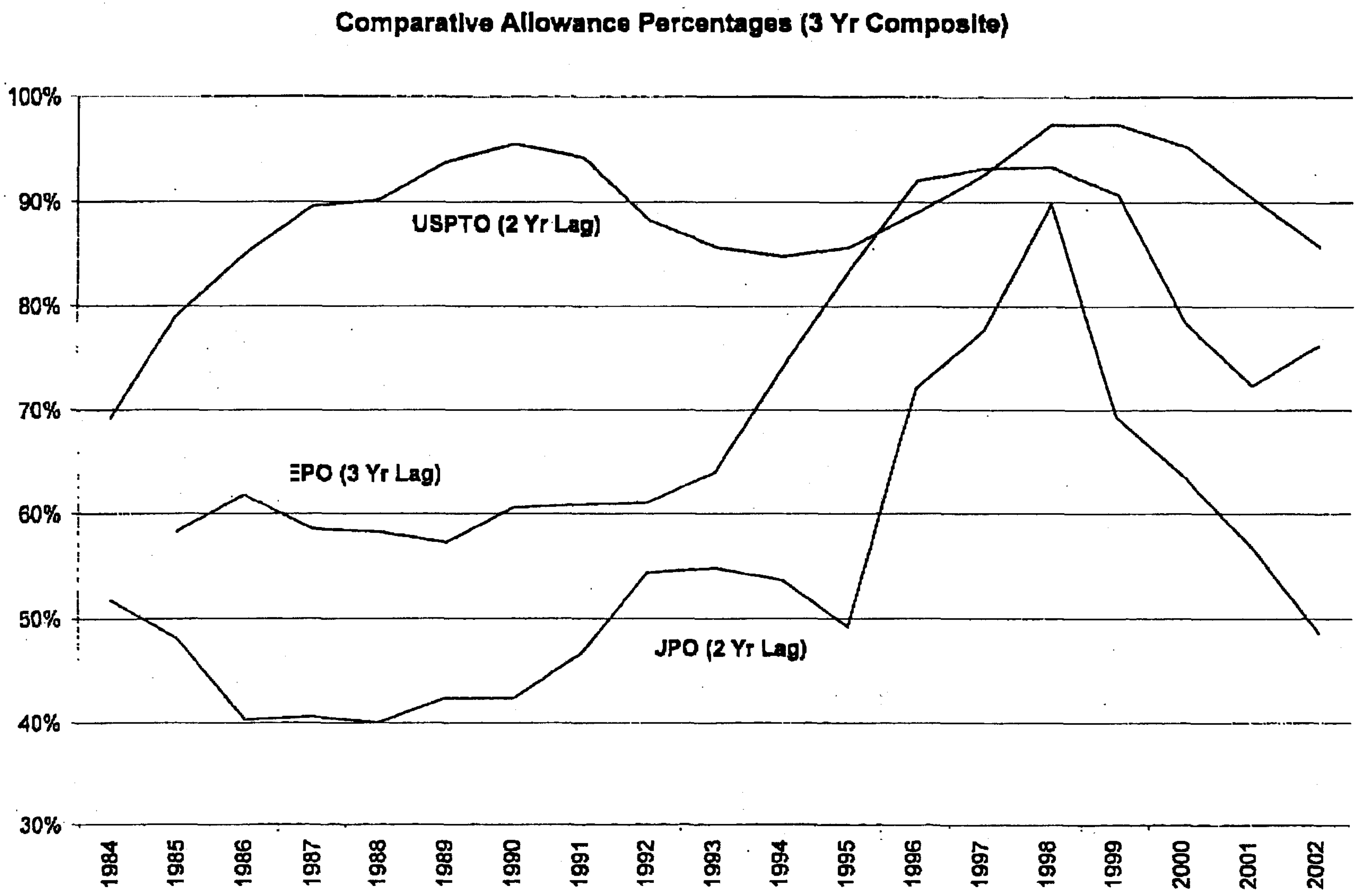
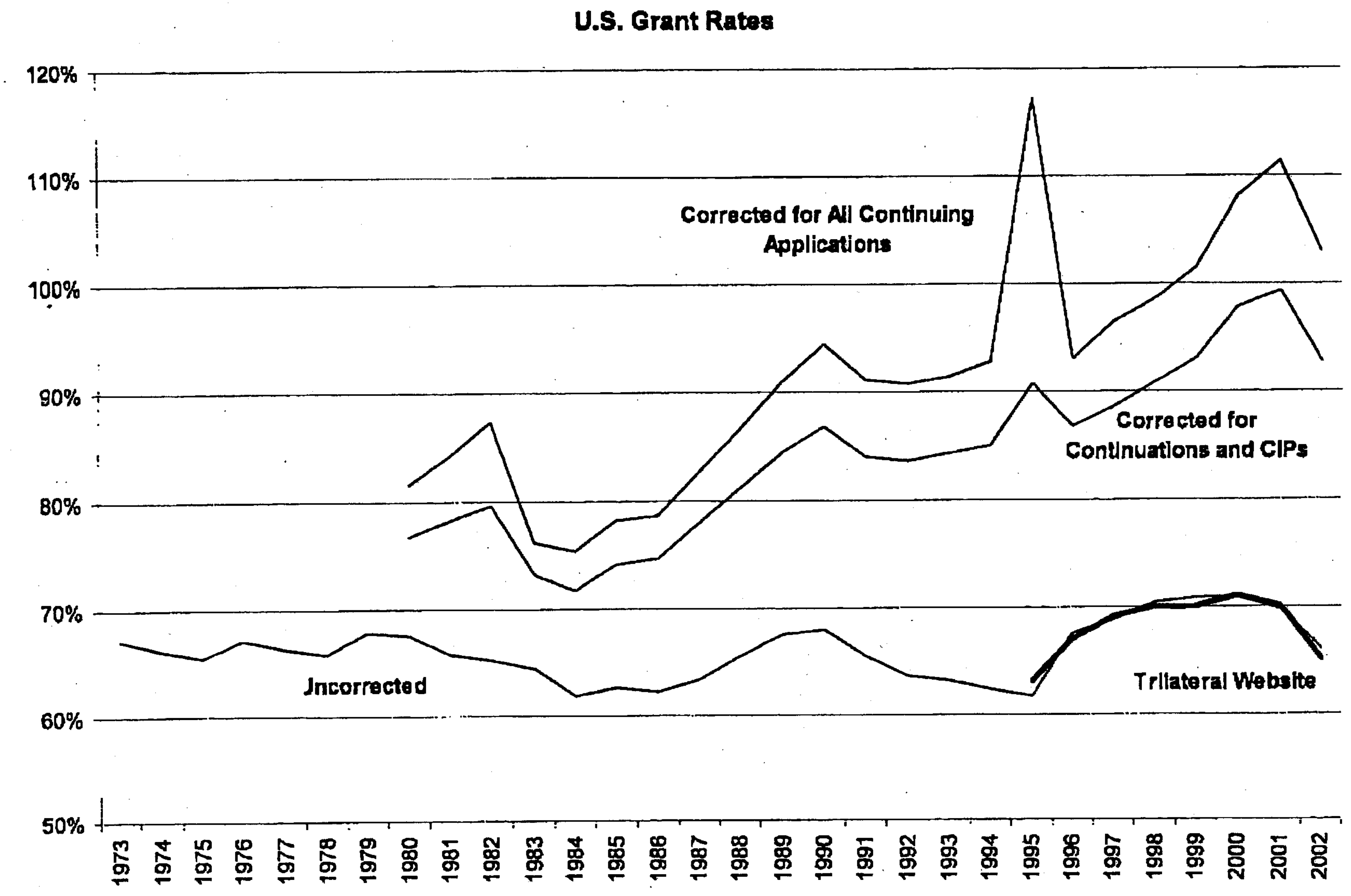
1994
1995
1996
1997
1998
1999
2000
2001
2002



Comparative Allowance Percentages (3 Yr Composite)
100%
90%
80%
70%
60%
50%
40%
30%
USPTO (2 Yr Lag)
EPO (3 Yr Lag)
JPO (2 Yr Lag)
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002

Patents by the Numbers


U.S. Grant Rates
120%
110%
100%
90%
80%
70%
60%
50%
Corrected for All Continuing Applications
Corrected for Continuations and CIPs
Uncorrected
Trilateral Website
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
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1988
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1992
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1994
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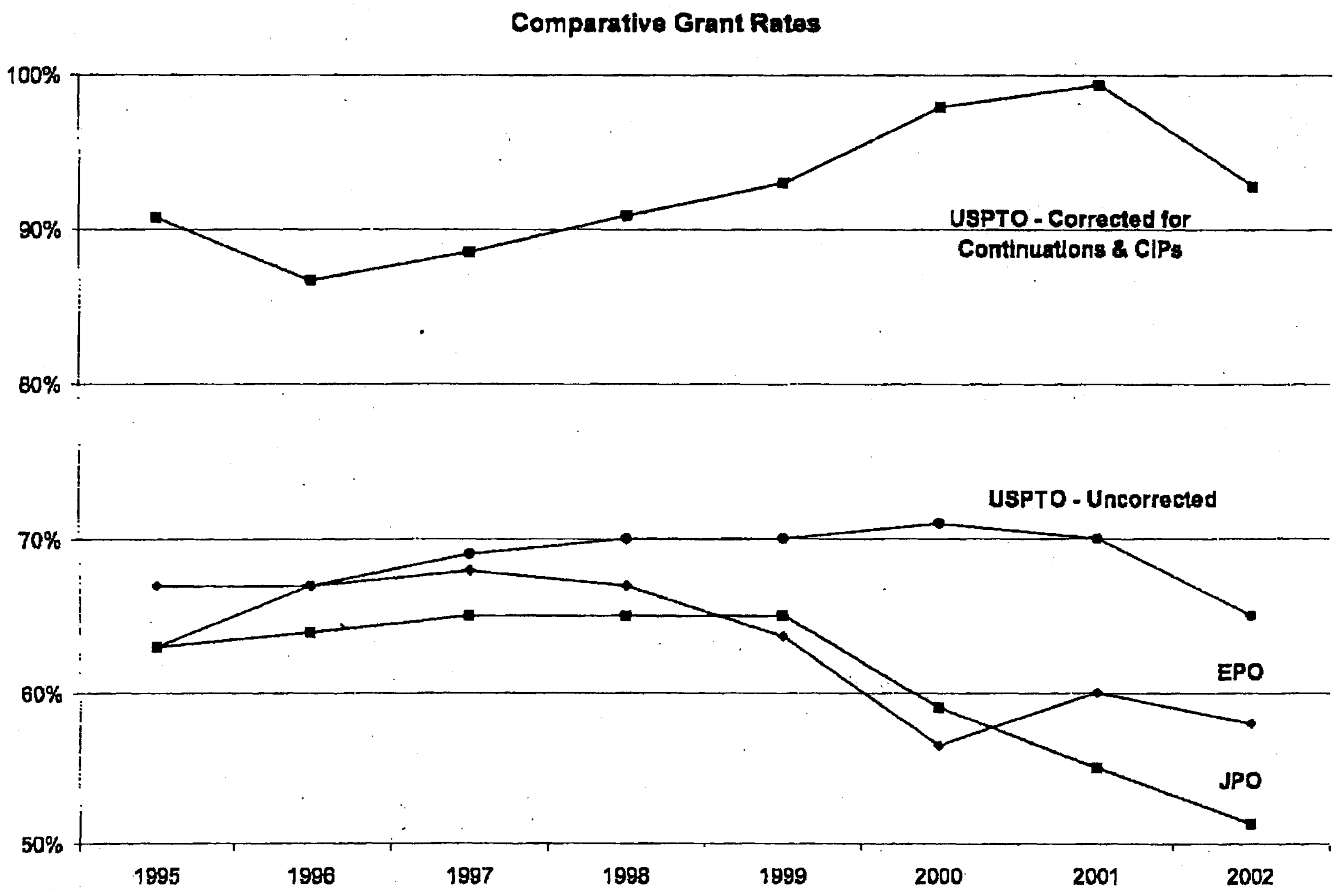
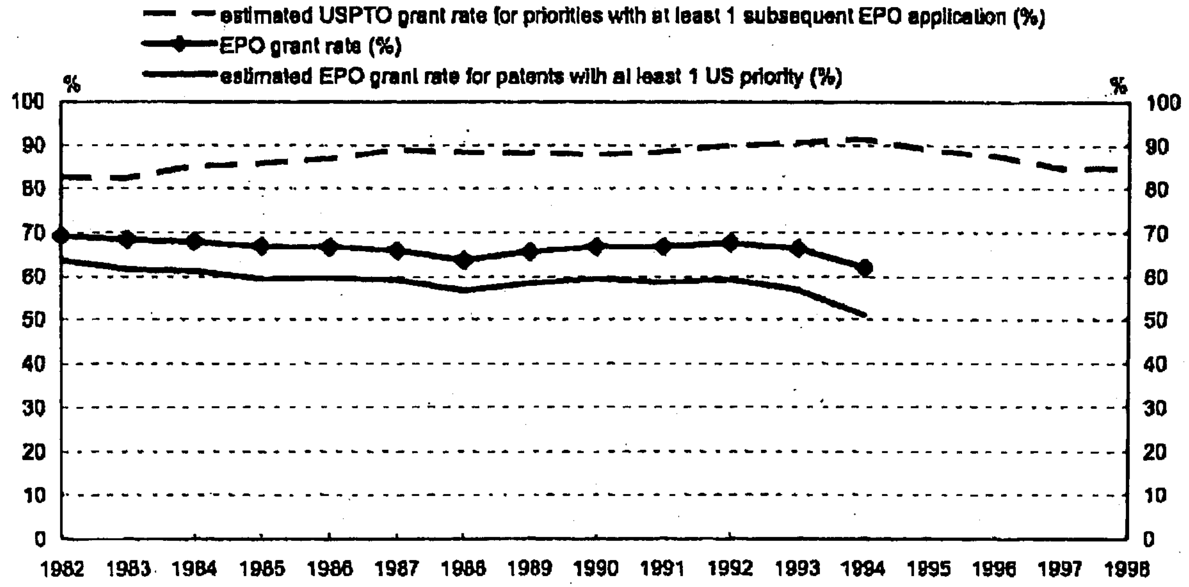
1996
1997
1998
1999
2000
2001
2002



Comparative Grant Rates
100%
90%
80%
70%
60%
50%
USPTO - Corrected for Continuations & CIPs
USPTO - Uncorrected
EPO
JPO
1995
1996
1997
1998
1999
2000
2001
2002

Figure 7. USPTO and EPO estimated grant rates

Priority years: 1982-98



estimated USPTO grant rate for priorities with at least 1 subsequent EPO application (%)
EPO grant rate (%)
estimated EPO grant rate for patents with at least 1 US priority (%)
%
%
100
90
80
70
60
50
40
30
20
10
0
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998

Note: EPO grant rates are defined as number of applications with grant date divided by total number of applications, sorted by year of priority (data on EPO grants is still partial for recent years). The methodology to estimate the grant rate at USPTO for US priorities also applied at EPO consists of the following steps: 1. Select all EPO applications with at least one US priority in the EPO database; 2. Track the corresponding patent number in the USPTO database on grants; 3. Divide the number of US priorities in EPO applications with a grant date at USPTO by the total number of US priorities in EPO applications, sorted by year of priority. Priority year corresponds to the initial date of filing of a patent application worldwide, regardless of subsequent filings in other countries; it normally corresponds to the date of filing in the applicant's domestic patent office.

Source: OECD Patent Database, November 2003.